2	COMPOUR DIOPPING	5.02	Having return coincide with
3	CONTOUR PLOTTING		swept display or detector
3.01	RANGE OR REMOTE DISTANCE FINDING .Triangulation ranging to a point	5.03	Having one or more return
3.01	with one projected beam		pulse gates or windows
3.02	Using photodetection with a	5.04	Including a displayed image
3.02	fixed axial line of sight	5.05	Having pulse transmission
3.03	Using a source beam with a		trigger significance
3.03	fixed axial direction or plane	5.06	Including optical pick-off of
3.04	With a single staring		transmission start
3.01	photodetector having one	5.07	With specific counter type
	element		timing of returns
3.05	Having moving receiver optics	5.08	Including specific counter
3.06	With a single photodetector		type timing of returns
	having multiple elements	5.09	Of frequency difference
3.07	Having electronic scanning of	5.1	Of CW phase delay
	the photodetector	5.11	Having multiple carrier or
3.08	With at least one paired set		modulation frequencies
	of staring photodetectors	5.12	Including an alternating
3.09	Requiring scanning of a source		reference path
	beam	5.13	Having an alternating
3.1	.Triangulation ranging to a point		reference path
	with two or more projected	5.14	Having polarization
	beams		discrimination
3.11	Using photodetection at the	5.15	Having specific IF mixing of
	<pre>source station(s)</pre>	_	returns
3.12	Using photodetection remote	6	.Instrument condition testing or
	from the source station(s)	_	indicating
3.13	.Triangulation ranging with	7	.Periscope or offset type
	photodetection, but with no	8	.With view finder
2 14	projected beam	9	.Base line instrument (i.e., base
3.14	Using at least a pair of	10	is a part of instrument)
2 1 5	viewing axes	11	With filter or light valveRange finder combined with
3.15	With one viewing axis fixed	11	height finder
3.16	With moving optical elements	12	Stereoscopic
4.01	in all viewing axes	13	Ortho-pseudo type
4.01	.With photodetectionOf a simulation or test	14	Stationary measuring marks
4.02	Of focused image size or	15	Length of base line variable
4.03	dimensions	16	Image displaced by moving
4.04	Of degree of defocus	10	refracting element
4.05	Of focal point search	17	Image displaced by rotating
4.06	Of differential amplitude at		reflecting element
1.00	two source or detector	18	With mounting, supporting,
	distances		adjusting, or folding
4.07	Of intensity proportional to		structure
	distance	19	Prism structure for determining
4.08	Of height relative to a light		coincidence
	plane	20	.External basis type
4.09	Of light interference fringes	21	Object size or distance known
4.1	Having different frequency	22	With displaced images
	sources	23	MOTION STOPPING (E.G.,
5.01	Of pulse transit time		STROBOSCOPES)

0.4		<i>-</i> 1	
24	.Periodically moving reflecting	64	.With light box
	or refracting element	65	With egg turning or jarring
25	.Periodically moving light interrupting element	66	With particular illumination means
26	Vibrating or oscillating element	67	With particular electrical switching
27	VELOCITY OR VELOCITY/HEIGHT	68	.Lamp attachments
27	MEASURING		-
20		69	CUTTING BLADE SHARPNESS
28	.With light detector (e.g.,	70	OIL TESTING (E.G., CONTAMINATION)
00 5	photocell)	71	DOCUMENT PATTERN ANALYSIS OR
28.5	Of light interference (e.g.,		VERIFICATION
	interferometer)	72	WITH PLURAL DIVERSE TEST OR ART
29	OPTICAL ELEMENT OR RETICLE	73	PLURAL TEST
	RESPONDS TO RELATIVE VELOCITY	73.1	FOR OPTICAL FIBER OR WAVEGUIDE
	OF REMOTE OBJECT		INSPECTION
30	CRYSTAL OR GEM EXAMINATION	300	BY DISPERSED LIGHT SPECTROSCOPY
31	.Axes determination	301	.With Raman type light scattering
32	MATERIAL STRAIN ANALYSIS	302	.For spectrographic (i.e.,
33	.With polarized light		photographic) investigation
34	Attached detector	303	With spectral analysis
35	Sheet material	304	With sectored disc
35.5	.By light interference detector	305	With diffraction grating
	(e.g., interferometer)	306	.With internal standard
36	WITH SAMPLE PREPARATION		comparison
37	.Condensation nuclei detector	307	.With background radiation
38	.Depositing particles on optical		comparison
	surface	308	.With synchronized spectrum
39	BLOOD ANALYSIS	300	repetitive scanning (e.g.,
40	.Hemoglobin concentration		cathode-ray readout)
41	Oximeters	309	Using plural beams
42	Standards	310	.With aperture mask
43	OPTICAL PYROMETERS	311	.With sample excitation (e.g.,
44	.With sample engaging rod or tube	311	burning)
45	.Plural color responsive	312	By electrical resistance
46	.With incandescent standard	312	heating (e.g., graphite tube)
47	Automatic intensity control	313	By arc or spark
48	-	314	Including sputtering
49	Modulating (e.g., flicker beam)	315	Including sputteringBy flame
	Telescopic		-
50	Current control	316	By high frequency field (e.g.,
51	INFRARED AND ULTRAVIOLET	217	plasma discharge)
52	EGG CANDLING	317	By light
53	.Photoelectric	318	Monochromatic (e.g., laser)
54	.With counting, marking, or weighing	319	<pre>.Utilizing a spectrophotometer (i.e., plural beam)</pre>
55	.With egg transfer	320	Having plural wavelengths
56	With egg turning or jarring	321	Having servo equalization
57	Endless conveyor	322	With polarized light beams
58	-	323	With polarized light beamsHaving beam modulation
50 59	Endless conveyorManual transfer	323	With plural dispersion
		324	
60	With light shading chamber	325 326	Prior to testing
61	Portable receptacles		.Utilizing a spectrometer
62	.With light shading chamber	327	Having light polarizing means
63	Hood type		

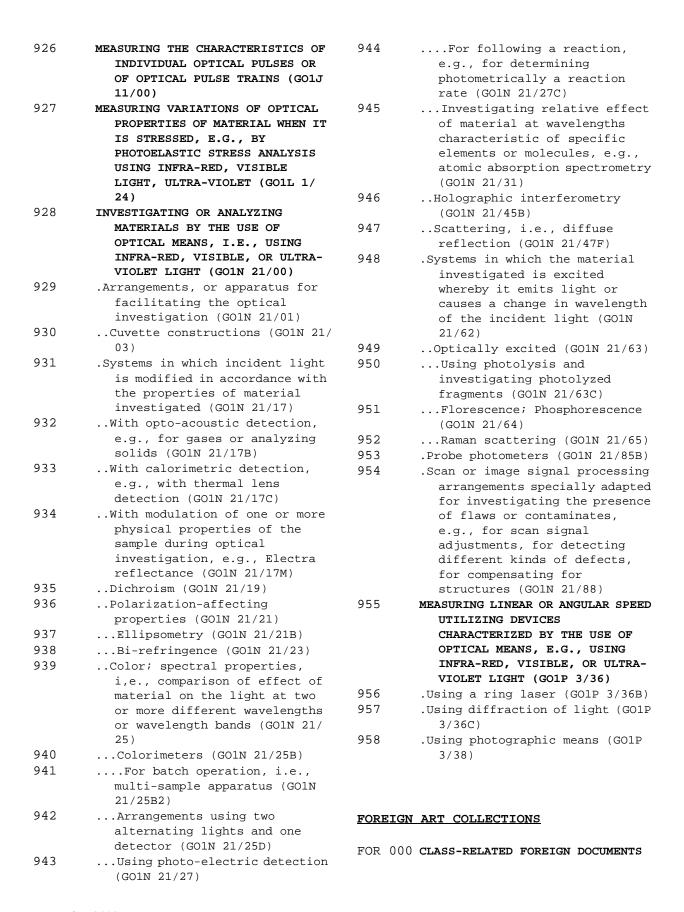
328	Having diffraction grating means	470	Passive cavity (laser source outside cavity)
329	Including servo slit	471	Multi-axis cavity
	adjustment means	472	Lock-in prevention
330	Having optical gating means	473	Path length control (PLC)
331	.With monochromator structure	474	Having dither signal removal
332	Having adjustable color or		from output
	bandwidth	475	Having dither signal control
333	In a double monochromator	476	By dithering (suspensions,
334	With diffraction grating means		drives, flexures)
335	FOR SIZE OF PARTICLES	477	.Using fiber or waveguide
336	.By particle light scattering		interferometer
337	BY PARTICLE LIGHT SCATTERING	478	Multiplexed sensor array
338	.With photocell detection	479	Having a short coherence length
339	At right angles to the light		source
	<pre>beam (e.g., nephelometer)</pre>	480	Resonant cavity
340	At variable angle to the light	481	Refraction indexing
	beam	482	For distance or displacement
341	For light comparison means		measurement
342	Of back-scattered light	483	Plural counter-propagating
343	Using plural photocells		beams (e.g., non-motion Sagnac
344	BY ELECTROPHORESIS		device)
450	BY LIGHT INTERFERENCE (E.G.,	484	.Having light beams of different
	INTERFEROMETER)		frequencies (e.g.,
451	.Spectroscopy		heterodyning)
452	Having particular linear mirror	485	For dimensional measurement
	drive or configuration		(e.g., thickness gap,
453	Polarization	406	alignment, profile)
454	Fabry-Perot type or Etalon Type	486	Displacement or distance
455	Having a rotating, pendulous,	487	Polarization
	or wedge scanning element	488	Having wavefront division
456	Imaging	489	(e.g., by diffraction)
457	.Holography	490	Contour or profileAlignment
458	For optical configuration	491	Alignment .Having polarization
459	.Rotation rate (e.g., ring laser	492	For dimensional measurement
4.5.0	gyros)	493	Displacement or distance
460	By fiber or waveguide	494	Having wavefront division
	interferometer (e.g., Sagnac	101	(e.g., by diffraction)
461	effect)	495	Contour or profile
462	<pre>Resonant loopMulti-axis (X-Y-Z) having</pre>	496	.For dimensional measurement
102	multiplexing	497	Having short coherence length
463	Multiple harmonic output		source
464	Having null feedback loop	498	Displacement or distance
465	Fiber coil winding	499	Having wavefront division
466	Having m x n loop coupler		(e.g., by diffraction)
100	where (m is greater than 2)	500	X-Y and/or Z table
	and (n is greater than or	501	Of probe head (e.g., atomic
	equal to 2) (e.g., passive		force microscope)
	bias)	502	Surface displacement due to
467	Four frequency, multi-		acoustic wave propagation)
	oscillator, non-planar cavity	503	Thickness
468	Cavity output beam combiner	504	Refraction from surfaces of
469	Cavity mirror details		different refractive index
		505	Gap

506	Fabry-Perot type	137	Plural prisms
507	Between slider/disc (e.g., flying height)	138	ANGLE MEASURING OR ANGULAR AXIAL ALIGNMENT
508	For orientation or alignment	139	.Plural scales or different
509	Between mask and wafer	137	portions of same scale
510	Tilt		simultaneously observable
511	Contour or profile	139.01	.Star/Sun/Satellite position
512	By wavefront detection	137.01	indication with photodetection
513	Of highly reflective surface	139.02	With reticle or slot
213		139.03	Relative attitude indication
514	(e.g., mirror)Planar surface	137.03	along 3 axes with
514	Of transmission (e.g., lens)		photodetection
		139.04	.Automatic following or aligning
516	Step height (differential,	133.01	while indicating measurement
F17	between points)	139.05	With optical elements moving
517	.For refractive indexing	137.03	relative to fixed housing to
518	Having Schlieren effect		follow or align
519	.Having partially reflecting	139.06	With optical housing moving to
	plates in series (e.g., Fabry-	137.00	follow or align
F 2 0	Perot type)	139.07	With photodetection of
520	.Having shearing	137.07	reflected beam angle with
521	.Having wavefront division (by diffraction)		respect to a unidirectional
264			source beam
364	BY POLARIZED LIGHT EXAMINATION	139.08	With source beam moving to
365	.With birefringent element		follow or align
366	.With polariscopes	139.09	.Wheel alignment with
367	Including polarimeters		photodetection
368	With electro-optical light	139.1	.Photodetection of inclination
260	rotation		from level or vertical
369	.Of surface reflection	140	.Apex of angle at observing or
370	.With light attenuation		detecting station
121	LAMP BEAM DIRECTION OR PATTERN	141.1	With photodetection of
122	.With lamp focusing		reflected beam angle with
123	FOCAL POSITION OF LIGHT SOURCE		respect to a unidirectional
124	LENS OR REFLECTIVE IMAGE FORMER		source beam
104 5	TESTING	141.2	With photodetection
124.5	.For optical transfer function	141.3	With unidirectional or planar
125	.Focal length measuring		source beam directed at the
126	Deflecting or interrupting		photodetecting station
100	optical path	141.4	With optical scanning of light
127	.Optical center, cylinder axis,		beam or detector
	or prism measuring or	141.5	With at least 2-dimensional
100	determining		sensitivity
128	REFRACTION TESTING (E.G.,	142	Scale and remote point
100	REFRACTOMETERS)		simultaneously observable
129	.Schlieren effect	143	Artificial reference
130	Differential	144	With plural images
131	With servo controlled optical	145	Lines of sight relatively
120	member		adjustable with two degrees of
132	Reflective optical member		freedom
133	Refractive rod engages specimen	146	Two or more lines of sight
134	.Prism forming fluid specimen		deflected
125	container	147	Measurement in two planes
135	.Prism engaging specimen		(e.g., azimuth and elevation;
136	Internally reflecting prism		hour angle and declination)

148	Artificial reference	627	.Volume
149	Gyroscope or pendulum	628	.Area
	stabilized optical element	629	Light scanning
150	.Sides of angle or axes being	630	.Thickness
	aligned transverse to optical	631	By triangulation
	<pre>axis (e.g., drift meter)</pre>	632	Of light permeable material
151	With light pulsing or	634	.Length
	interrupting means	635	.Width or diameter
152.1	.With photodetection remote from	636	Line width
	measured angle	637	Web
152.2	With reflection of a	638	Shadow or beam blocking
	unidirectional source beam	639	Scanning
	from a planar or	640	Single beam scans entire
	nonretroreflective surface		width or diameter
152.3	With reflection of a	388	BY CONFIGURATION COMPARISON
	unidirectional source beam	389	.With photosensitive film or
	from a retroreflector	303	plate
153	.Alignment of axes nominally	390	.With two images of single
	coaxial	370	article compared
154	.With screen	391	.With projection on viewing
155	Wheel alignment	371	screen
600	SURFACE ROUGHNESS	392	For comparison with master or
601	SHAPE OR SURFACE CONFIGURATION	374	desired configuration
602	.Triangulation	393	Having master or desired
603	Projection of structured light	373	configuration projection
	pattern	394	.With comparison to master,
604	Pattern is series of non-	394	
	intersecting lines		<pre>desired shape, or reference voltage</pre>
605	Moire	395	_
606	Line of light projected	393	.With relatively movable optical grids
607	Scan	396	_
608	Scan	390	.With scale or optical grid
609	.By focus detection		displaced relative to remote fiducial mark
610	.By projection of coded pattern	397	
611	.By stereo	397	.With object being compared and scale superimposed
612	By specular reflection	398	
613	.Silhouette	390	.With object being compared and
614	POSITION OR DISPLACEMENT		light beam moved relative to
		200	each other (e.g., scanning)
615	.Position transverse to viewing	399	BY ALIGNMENT IN LATERAL DIRECTION
C1 C	axis	400	.With light detector (e.g.,
616	Having scale or grid	401	photocell)
617	Coded scale	401	.With registration indicia (e.g.,
618	Moire	400	scale)
619	Quadrature detection	402	BY SHADE OR COLOR
620	Special mark or target on object	403	.With merging colors or patterns (e.g., Maxwell disc)
621	Occulting a projected light	404	.Photography
	beam	405	.Tristimulus examination
622	Position of detected	406	.Trichromatic examination
	arrangement relative to	407	.With sample responsive to plural
	projected beam		colors applied simultaneously
623	.Triangulation	408	.With sequential comparison of
624	.Focus		sample and standard
625	DIMENSION	409	.Fluid color transmission
626	.Cavities		examination

410	Of flowing liquids	214	.Pupillary
411	With plural light detectors	215	.Integrating
	(e.g., photocells)	216	.Heat absorbing (e.g.,
412	With ionic determination		radiometers)
413	With variable light path length	217	.Modulating (e.g., flicker beam)
414	With color transmitting filter	218	.Photoelectric
415	Including liquid filter	219	Simultaneous sighting and
	comparison		reading measurement
416	.With color transmitting filter	220	Multiple housings
417	Included with sample excitation	221	Responsive to incident or back
418	Including rotating sequential		lighting
	filters	222	Plural detectors
419	Including multicolor filters	223	Logarithmic
420	Included with colored light	224	Multisensitivity range
	sources	225	With predetector light modifier
421	.With reflective multicolor chart		(e.g., diaphragm)
	or standard	226	Detector and indicator
422	Plate		electrical coupling (e.g.,
423	Disk	00-	amplifying or attenuating)
424	Drum or endless tape	227	With particular indicator
425	.With color determination by	228	Movable scale (e.g.,
	light intensity comparison	000	calibrating)
426	BY INSPECTION WITH AGITATION OR	229	.Comparison
400	ROTATION	230	With light standard
427	.Of container contents	231	Variable incandescent standard
428	.Of containers	232	Standard movable
429	BY MONITORING OF WEBS OR THREAD	233	.With variable light aperture
430	.For flaws or imperfections	224	size
431	Including transverse scanning	234	.Light absorbing
122		776	7
432	FOR LIGHT TRANSMISSION OR	235	Absorber continuously variable
	ABSORPTION		(e.g., wedge)
433	ABSORPTION .By comparison	236	<pre>(e.g., wedge) .Integrating spheres</pre>
	ABSORPTION .By comparisonPhotoelectric (e.g., sequential	236 237.1	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES</pre>
433 434	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)	236 237.1 238.1	(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspection
433	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g.,	236 237.1	(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product
433 434 435	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing)	236 237.1 238.1 238.2	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)</pre>
433 434 435 436	ABSORPTION .By comparison .Photoelectric (e.g., sequential viewing) With plural detectors (e.g., simultaneous viewing) .Of fluent material	236 237.1 238.1	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material</pre>
433 434 435 436 437	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGas	236 237.1 238.1 238.2	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters,</pre>
433 434 435 436 437 438	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smoke	236 237.1 238.1 238.2 238.3	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.)</pre>
433 434 435 436 437 438 439	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContained	236 237.1 238.1 238.2	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters,</pre>
433 434 435 436 437 438	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder	236 237.1 238.1 238.2 238.3	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent material</pre>
433 434 435 436 437 438 439 440	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supply	236 237.1 238.1 238.2 238.3	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact</pre>
433 434 435 436 437 438 439	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in	236 237.1 238.1 238.2 238.3	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent material</pre>
433 434 435 436 437 438 439 440	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquid	236 237.1 238.1 238.2 238.3	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens,</pre>
433 434 435 436 437 438 439 440 441	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector	236 237.1 238.1 238.2 238.3 239.1	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)</pre>
433 434 435 436 437 438 439 440 441 442 443	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic film	236 237.1 238.1 238.2 238.3 239.1 239.2	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surface</pre>
433 434 435 436 437 438 439 440 441	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic filmWith scanning, sweeping, or	236 237.1 238.1 238.2 238.3 239.1 239.2	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surfaceContainers (e.g., bottles)</pre>
433 434 435 436 437 438 439 440 441 442 443	ABSORPTION .By comparison .Photoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic filmWith scanning, sweeping, or moving detector over film	236 237.1 238.1 238.2 238.3 239.1 239.2	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surfaceContainers (e.g., bottles)Detection of foreign matter on</pre>
433 434 435 436 437 438 439 440 441 442 443 444	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic filmWith scanning, sweeping, or	236 237.1 238.1 238.2 238.3 239.1 239.2 239.3 239.4 239.5	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surfaceContainers (e.g., bottles)Detection of foreign matter on or in container</pre>
433 434 435 436 437 438 439 440 441 442 443 444	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic filmWith scanning, sweeping, or moving detector over film OF LIGHT REFLECTION (E.G., GLASS) .With diffusion	236 237.1 238.1 238.2 238.3 239.1 239.2 239.3 239.4 239.5	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surfaceContainers (e.g., bottles)Detection of foreign matter on or in containerOf container contents</pre>
433 434 435 436 437 438 439 440 441 442 443 444 445 446	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic filmWith scanning, sweeping, or moving detector over film OF LIGHT REFLECTION (E.G., GLASS)	236 237.1 238.1 238.2 238.3 239.1 239.2 239.3 239.4 239.5 239.6 239.7	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surfaceContainers (e.g., bottles)Detection of foreign matter on or in containerOf container contentsSurface condition</pre>
433 434 435 436 437 438 439 440 441 442 443 444 445 446	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic filmWith scanning, sweeping, or moving detector over film OF LIGHT REFLECTION (E.G., GLASS) .With diffusion .With modulation (e.g., flicker	236 237.1 238.1 238.2 238.3 239.1 239.2 239.3 239.4 239.5 239.6 239.7	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surfaceContainers (e.g., bottles)Detection of foreign matter on or in containerOf container contentsSurface conditionDetection of an object or</pre>
433 434 435 436 437 438 439 440 441 442 443 444 445 446 447	ABSORPTION .By comparisonPhotoelectric (e.g., sequential viewing)With plural detectors (e.g., simultaneous viewing) .Of fluent materialGasExhaust, dust or smokeContainedWith significant sample holder or supplyHaving particles suspended in liquidWith light detector .Of photographic filmWith scanning, sweeping, or moving detector over film OF LIGHT REFLECTION (E.G., GLASS) .With diffusion .With modulation (e.g., flicker beam)	236 237.1 238.1 238.2 238.3 239.1 239.2 239.3 239.4 239.5 239.6 239.7 239.8	<pre>(e.g., wedge) .Integrating spheres INSPECTION OF FLAWS OR IMPURITIES .Textile inspectionElongated textile product (e.g., thread, yarn, etc.)Detection of foreign material (e.g., trash, splinters, contaminants, etc.) .Transparent or translucent materialOptical element (e.g., contact lens, prism, filter, lens, etc.)Patterned surfaceContainers (e.g., bottles)Detection of foreign matter on or in containerOf container contentsSurface conditionDetection of an object or particle on surface</pre>

241.1	.Bore inspection (e.g.,		
	borescopes, intrascope, etc.)	CROSS-	REFERENCE ART COLLECTIONS
241.2	Firearm bore inspection		
241.3	With adjustable head	900	INTERFEROMETERS (GO1B 9/02)
241.4	Flexible	901	.Involving fiber optics or
241.5	Specific construction of distal		integrated optics (GO1B 9/02F)
	end	902	.Involving diffraction gratings
241.6	Having quiding means		(GO1B 9/02G)
237.2	.Surface condition	903	.Using holographic techniques
237.3	Detection of object or particle		(GO1B 9/021)
	on surface	904	MEASURING MICROSCOPES (GO1B 9/04)
237.4	On patterned or topographical	905	MEASURING TELESCOPES (GO1B 9/06)
	surface (e.g., wafer, mask,	906	OPTICAL PROJECTION COMPARATORS,
	circuit board)	200	E.G., FOR PROFILE (GO1B 9/08)
237.5	On patterned or topographical	907	GONIOMETERS (GO1B 9/10)
	surface (e.g., wafer, mask,	908	MEASURING LENGTH, WIDTH, OR
	circuit board)	200	THICKNESS (GO1B 11/02)
237.6	.Having predetermined light	909	.By means of tv-camera scanning
	transmission regions (e.g.,	303	(G01B 11/02B)
	holes, aperture, multiple	910	.By means of diode-array scanning
	material articles)	7 2 0	(GO1B 11/02C)
242.1	THREAD COUNTING	911	MEASURING THE DEFORMATION IN A
243.1	STANDARD	711	SOLID, E.G., OPTICAL STRAIN
243.2	.For fluid suspended particles		GAUGE (GO1B 11/16)
243.3	.Flying height testers	912	MEASURING ANGLES (GO1C 1/00)
243.4	.Surface standard	913	.Theodolites (GO1C 1/02)
243.5	Color	914	Combined with cameras (GO1C 1/
243.6	Foreign object		04)
243.7	Texture	915	.Sextants (G01C 1/08)
243.8	Light intensity	916	ALTIMETERS FOR AIRCRAFT (GO1C 5/
244	SAMPLE, SPECIMEN, OR STANDARD		00A)
	HOLDER OR SUPPORT (E.G.,	917	MEASURING INCLINATION, E.G., BY
	PLATES OR SLIDES)		CLINOMETERS, BY LEVELS (GO1C
245	.Cotton graders		9/00)
246	<pre>.Fluid containers (e.g., cells or cuvettes)</pre>	918	PHOTOGRAMMETRY; PHOTOGRAPHIC SURVEYING (GO1C 11/00)
247	FIDUCIAL INSTRUMENTS	919	.Picture taking arrangements
248	.Artificial reference	212	specially adapted for
249	Liquid surface (e.g., bubble		photogrammetry or photographic
	level)		surveying, e.g., controlling
250	Pendular suspension of optical element or reticle		overlapping of pictures (GO1C 11/02)
251	Reticle lies outside viewing	920	By scanning the object (GO1C
231	path	220	11/02A)
252	Reticle image transversely	921	.Interpretation of pictures (GO1C
232	adjustable relative to optical	,	11/04)
	axis	922	PHOTOMETRY, E.G., PHOTOGRAPHIC
253	.Deflection of line of sight		EXPOSURE METER (GO1J 11/04)
254	Two or more deflections	923	RADIATION PYROMETRY (GOLJ 5/00)
255	By reflection	924	MEASURING VELOCITY OF LIGHT (GOLJ
256	MISCELLANEOUS	- -	7/00)
		925	MEASURING OPTICAL PHASE
			DIFFERENCE: MEASURING OPTICAL WAVELENGTH (GO1J 9/00)



Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 INSPECTION FOR FLAWS OR IMPERFECTIONS (356/237)

- FOR 101 .Cloth or thread inspection (356/ 238)
- FOR 102 .Passing light through a transparent or translucent article (356/239)
- FOR 103 ..Containers (e.g., bottles) or contents (356/240)
- FOR 104 .Bore inspection (e.g., borescopes) (356/241)
- FOR 105 **THREAD COUNTING (356/242)**
- FOR 106 STANDARDS (356/243)
- FOR 107 BY LIGHT INTERFERENCE (E.G., INTERFEROMETERS) (356/345)
- FOR 108 .Spectroscopy (356/346)
- FOR 109 .Holography (356/347)
- FOR 110 .. For optical configuration (356/ 348)
- FOR 111 .With light beams of different frequency (e.g., heterodyning) (356/349)
- FOR 112 .. For rotation rate (e.g., ring laser) (356/350)
- FOR 113 .With polarization (356/351)
- FOR 114 .With partially reflecting plates in series (e.g., Fabry-Perot type) (356/352)
- FOR 115 .With shearing (356/353)
- FOR 116 .With wavefront division (e.g., by diffraction) (356/354)
- FOR 117 ...For dimensional measurement (e.g., thickness) (356/355)
- FOR 118 ...Of displacement or distance (356/356)
- FOR 119 .For dimensional measurement (e.g., thickness) (356/357)
- FOR 120 .. Of displacement or distance (356/358)
- FOR 121 .For optical configuration (356/ 359)
- FOR 122 ..With two light beams (e.g., Twyman-Green) (356/360)

- FOR 123 .For refractive indexing (356/ 361)
- FOR 124 .. With Schlieren effect (356/362)
- FOR 125 .For orientation and alignment (356/363)
- FOR 126 FOR FLATNESS (356/371)
- FOR 127 BY MENSURATION (356/372)
- FOR 128 .Of article displacement (356/ 373)
- FOR 129 ..Including moire' fringe (356/ 374)
- FOR 130 .Of position (356/375)
- FOR 131 .Of contour or profile (356/376)
- FOR 132 .. With curve readers (356/377)
- FOR 133 .Of cavities (356/378)
- FOR 134 .Of area or volume (356/379)
- FOR 135 .. By scanning (356/380)
- FOR 136 .Of thickness (356/381)
- FOR 137 .. Of light permeable material (356/382)
- FOR 138 .Of length (356/383)
- FOR 139 .Of width or diameter (356/384)
- FOR 140 .. Of moving object (356/385)
- FOR 141 ...By scanning or light interruption (356/386)
- FOR 142 ..By scanning or light interruption (356/387)